

MINUTES
CHIEF OF ENGINEERS' ENVIRONMENTAL ADVISORY BOARD MEETING
University of California, Berkeley, CA
13 May 2004

1. The Chief of Engineers, **LTG Robert Flowers**, called the Environmental Advisory Board (EAB) meeting to order at 0900 hours, 13 May 2004. The following EAB members were present:
 - **Mr. Kenneth Babcock**, Southern Regional Office, Ducks Unlimited; formerly with Missouri Department of Conservation
 - **Dr. Mohammed Dahab**, Chairman, Civil Engineering Department, University of Nebraska
 - **Dr. Michael Donahue**, President and Chief Executive Officer, Great Lakes Commission
 - **Dr. Theodore Hullar**, Cornell University, formerly with New York State Department of Environmental Conservation
 - **Dr. Matthias Kondolf**, Associate Professor of Geography, University of California at Berkeley.
 - **Dr. Denise Reed**, Professor of Geology and Geophysics, University of Louisiana

Also present were **Mr. Fred Caver**, Deputy Director of Civil Works; and **Ms. Patricia Rivers**, Chief, USACE Environmental Community of Practice.

2. WELCOMING REMARKS:

COL Leonardo Flor, Acting South Pacific Division commander, welcomed the Chief and EAB to his Division, and thanked the University of California at Berkeley for hosting the meeting, noting that the San Francisco Bay Area is a center for environmental activity and activism. He recalled that the EAB had met in San Francisco in 1985 for a session entitled "Environmental Problems in the Bay Area," and suggested, after the Board's field trips of the two preceding days, that this meeting could be entitled, "Environmental Solutions in the Bay Area."

LTG Flowers added his welcome, and thanked South Pacific Division for hosting the meeting and arranging the field trips. He noted that the Board was founded in 1972 by then-Chief of Engineers Lieutenant General Frederick Clarke to gain independent advice on how the Corps could best comply with new environmental mandates such as the National Environmental Policy Act (NEPA) and work with the rising environmental movement. He said he hoped his legacy would be one of leveraging the Board to help the Corps examine strategic issues in an environmental context.

3. USACE STRATEGIC DIRECTION:

Mr. Caver discussed the Civil Works Strategic Plan, mandated by the Government Performance & Results Act of 1993, and, finally, approved for release in April 2004 after an eight-year effort. The Administration and Congress, he explained, view the Corps of Engineers as a separate agency for purposes of GPRA.

The plan, he pointed out, was heavily influenced by input from stakeholders, customers and other interested parties, gathered at such venues as the 16 "listening sessions" USACE held around the country in 2000 and the American Water Resources Association's Water Policy Dialogue in Sept. 2002. Common themes that emerged from these meetings included a need for the Corps to be more flexible and collaborative, streamline its business processes, and seek environmentally sustainable solutions. Participants at the meetings generally agreed that the most valuable element the Corps brings to any enterprise is its robust engineering, scientific and technical capability. The Corps, he said, must not become simply a project management and grants agency, but should recruit and retain Federal employees with strong engineering and scientific knowledge to ensure that it continues to deliver value.

The Plan's five goals are to:

- 1: Provide sustainable development and integrated management of the nation's water resources.
- 2: Repair past environmental degradation and prevent future environmental losses.
- 3: Ensure that projects perform to meet authorized purposes and evolving conditions.
- 4: Reduce vulnerabilities and losses to the nation and the Army from natural and man-made disasters, including terrorism.
- 5: Be a world-class public engineering organization.

Key to future Corps success, he said, will be implementation of Goal #1. In the past, he explained, the Corps focused on single projects – a trend fostered by the Water Resources Development Act of 1986, which requires local cost sharing for most projects. The public would be better served, he said, by a watershed approach that looks at projects in the context of other activities and water uses within a basin. This does not mean big master plans, but rather an approach that relies on consensus building within a region. Nor does the term “watershed,” as applied in the Strategic Plan, necessarily imply a hydrologic entity, but could apply to any region. Likewise, he said, under Goal #2, Corps projects should be economically justifiable and environmentally sustainable.

The Plan, Mr. Caver said, documents Corps thinking at this point in time, and its value is more in the continuing process of strategic thinking than in the plan itself. The Corps can't look at the Plan and say, “now we've done strategy.”

At Corps Headquarters, he said, a Strategic Integration Division has been formed to focus the organization on strategy – a continuing process. The Corps has always said, “the HQ develops strategy, the field executes it,” but under the new organization, USACE 2012, this concept is being followed to a degree never seen before.

Strategic planning, Mr. Caver said, is a process of horizon-gazing, for which the Environmental Advisory Board is a key asset, given the diversity of views represented on the Board and its access to ideas and contacts the Corps doesn't have. The Board's report on Independent Scientific Review, presented at the last meeting and refined since then, has been especially useful; Congress included many of its recommendations in the Water Resources Development Act (WRDA) passed by the House last fall. The Senate is now deliberating on its own WRDA, so the Board's report was very timely. The Corps supports the concept of Independent Review, especially if it can be done without undue cost increases or delays in the planning process.

4. UPCOMING ENVIRONMENTAL ISSUES:

LTG Flowers invited Board members to identify issues they foresee for the Corps in upcoming years, and directions on which they would like to focus under the next Chief of Engineers.

Ms. Rivers noted that, at the past several meetings, the Board has taken field trips to project sites that provide a tactical view of the strategic concepts addressed at the meetings. In the future, she suggested, in addition to the field trips the Board could benefit from meetings with stakeholders, such as the Texas Water Resources Board, to hear about their specific issues. Such meetings would allow a higher-level discussion of Corps strategy.

Introducing issues for the Board to consider, **Dr. Dahab** said, 1) There have been six years of drought in the Midwest, and he fears a replay of the Dust Bowl of the 1930s, so he would suggest the Board consider issues related to water scarcity, such as management of competing uses, interbasin transfers, etc. 2) Related to this issue is that of water quality, including salinity (especially in the Midwest) and degradation from human use, chemical runoff, etc. 3) Another issue rising in importance in the Corps is an infrastructure

aging faster than the Corps, or other agencies, can rehabilitate it. By infrastructure, he said, he was referring to management as well as physical structures. The U.S., he said, is not devoting sufficient resources to either; but the Corps can be a leader in raising awareness of the need.

Dr. Kondolf suggested the Board look at water supply challenges. There are traditional shortages in places like Las Vegas, where construction has far outpaced water availability; but also in the East, where there is plenty of water, but the quality is declining. In California, he said, many wells have gone bad due to nitrates. The Board, he suggested, could look at how claims on scarce water are allocated. California, he suggested, could benefit from some water now set aside for agriculture being re-allocated to urban use. Another challenge is the filling of reservoirs with sediment –some in California are already full. Proposals to remove dams and extract aggregates from these filled reservoirs would be a possible solution, but costs would be large. Another possible direction for the Corps would be operational changes at dams to produce environmental benefits, such as going beyond authorized releases during floods. The Corps did not do this in the California Floods of 1997, he said, and the result was an uncontrolled flood. Authorized release levels, he suggested, are often too low to benefit downstream ecosystems.

Mr. Babcock emphasized the need to implement the Corps Strategic Plan, and the need to keep scientific capacities in the Corps while at the same time looking for opportunities for partnerships to gain the views of entities that take a different view of resources than the Corps does. He suggested more willingness to look at non-structural solutions to water resource problems – the Corps, he said, still often has a mindset of wanting to conquer nature. He also suggested the need to interface what happens in the water with what happens on land; agricultural land use policy should be part of water resource management.

Dr. Donahue commented that, if the Corps logo were removed from the Strategic Plan, it could apply to a number of agencies. Referring to the topics of water quality and land use, he said the need to link the two are increasingly apparent in the Midwest, where problems in the Great Lakes arise inland, not in the water. It is easy, he said, to view water as a shared resource, but far more difficult with land use. He also discussed partnerships and the need for leadership of interagency teams – “the orchestra is assembled, but who has the baton?” He called the Corps “the only game in town” when it comes to integrating economic development with environmental sustainability.

Dr. Reed referred back to the themes of water quantity and quality. With increased climactic variability, she said, these have become much harder to predict, and the Corps needs to develop an approach to deal with this uncertainty – to look at what it doesn’t know and take a less deterministic approach to planning. Likewise, she said, competition between water uses will be harder to predict, but the Corps is in a good position to develop decision support tools that support ecosystem planning.

Dr. Hullar said a major challenge would be a future of water scarcity, not only in the U.S. but globally. In such a situation, it will be difficult to ensure water is available for environmental services as well as traditional uses. Americans and others must learn by doing here – “adaptive management” is easy to say, but hard to do. Building organizations to meet future needs will be another challenge. The Corps has made major strides here, but can expand the circle through partnerships, which it can lead, but doesn’t have to. Finally, he encouraged the Corps to think internationally and be a world citizen in managing water.

LTG Flowers noted that the Corps has Memoranda of Agreement with the Netherlands and Japan, and is working on one with China.

5. WORKING CORPS CULTURE TO MEET CHALLENGES:

LTG Flowers summed up the themes of the preceding discussion – water quantity and quality and the need for partnerships, and called for comment from the Board on how the Corps could work its culture to meet these challenges.

Dr. Hullar said that the Environmental Protection Agency moved toward a watershed concept several years ago, and now the Corps is doing likewise. The Corps, he said, must not get “parochial,” but continue the partnering theme.

Dr. Reed said recent Corps work on the Upper Mississippi River offers a model of cooperation – calling stakeholders together and thinking about the future.

Mr. Caver remarked that Texas has shown leadership in looking at the future of water resources. The State is an example of how the Corps need not be in charge, but can take a role in supporting others in their goals.

LTG Flowers agreed that the idea of the Corps being in charge is not always appropriate – there are many situations where others can use the Corps as a resource in a supporting role. In Texas, he said, there are also interesting examples of military installations relating to the State and its localities.

Mr. Babcock pointed out that leadership and “being in charge” are not always the same. He also suggested expanding the partnering concepts from government agencies to nonprofit organizations.

Dr. Hullar suggested that, in looking at partnerships, the Corps look at the San Francisco Bay area, where hundreds of organizations work together. The same is true in the Great Lakes region, and he suggested the Board visit there to examine these partnerships, including those with Canada.

LTG Flowers said that Texas and the Great Lakes both looked good as destinations for Board visits.

Mr. Babcock said the Corps has a major challenge to make potential partners see that it is serious about operating in a more holistic, inclusive way. One such effort was the recent meeting with Garden Clubs in Washington, DC – these groups are active in many environmental causes. Another possibility is to increase Corps exposure in the news media. Still another approach would be more meetings with the directors of nonprofit organizations, regional commissions, etc. As a result of such exposure, he said, one agency that used to blast the Corps over its work on the Missouri River now says Corps concepts there are working well.

Dr. Reed, citing Strategic Goal #5, “Be a world class technological organization,” said she admires the Corps people she meets – consistently top-notch. She trains people to work for organizations like the Corps, and suggested it take a harder look at retaining them. One useful concept, she suggested, would be a career ladder that goes beyond GS-13 for people who would rather continue to work the technical side than go into management. The Corps should do more to encourage its employees to be active in their professions through participation in society meetings, presentation and publication of papers, etc. The Corps does this for its engineers, she said, but needs to expand the idea to other disciplines. In addition to developing employees, such outreach will increase respect for the Corps. She suggested the Corps look for people who think broadly. She would like to be able to encourage her graduate students to work for the Corps – “you’ll make a difference and have a rewarding career.” The Board, she said, especially those members whose mission involves training professionals, can help here.

LTG Flowers said the Corps is strengthening its members’ professional lives through the Communities of Practice, participation in vertical and horizontal teams, etc.

Mr. Caver said that, in his 35 years of experience with the Corps, he has seen it change its way of doing business. The old way, he said, stressed hierarchy, sequential work and “stovepipes.” It worked, but it was slow. The stovepipes did, however, find and retain talent – in the late 1960s the Corps was the employer of choice for civil engineers. The changes in the Corps since then were necessary, and beneficial ways, but had an unfortunate effect on retention of talented employees. Now the Corps is trying to remedy the situation with Communities of Practice. Board advise on how to go about it would be useful.

Dr. Dahab said a partnership between the Corps and the academic community, which he called “the Corps on Campus,” could be especially fruitful for both. As a department chair, he said, he sees many talented people in the field of water resources, and would like to see them partner with the Corps. The Corps, he said, can help academia in developing programs, and take advantage of academia’s expertise, not only for recruiting, but also for information exchange.

Dr. Hullar agreed, saying the U.S. Department of Agriculture is embedded in the academic community like no other agency, and all parties agree the relationship has been beneficial. He would like to see a consortium of universities working with the Corps, and said the Board could help develop the “Corps on Campus” concept.

Dr. Kondolf said the Board can also help the Corps learn from projects – not only its own, but those of others.

Mr. Caver, concluding the discussion, said a major part of the Chief of Engineers’ legacy is that of reviving the EAB to help him look at the Corps and its blind spots. The challenge to the Board now will be to recommend ways for the Corps to implement its current Civil Works Strategic Plan and inform preparation for the next one. He wants the EAB to continue to inform the Corps of its blind spots, and said the Corps must retain its expertise and not become merely a granting agency.

6. NEXT BOARD MEETING – LOCATION AND TOPICS:

LTG Flowers recalled two suggested locations for the next Board meetings: Texas, to include a meeting with the Texas Water Board and stakeholder groups there; and the Great Lakes, where several water resource integration issues merit the Board’s attention.

Dr. Hullar suggested the Great Lakes visit be first, since a study of Great Lakes navigation expansion, winter navigation, etc. is greatly misunderstood. Visiting the Great Lakes could also allow the Board to view progress on Lake Ontario.

Dr. Donahue said that site visits are important in connection with Board meetings, but in some cases the visits drive the agenda. The Corps, he suggested, should suggest an overarching theme for the meeting first, then fit site visits to it. A visit to the Great Lakes, he said, would speak to the sustainability theme – the Board could look at dredged material disposal issues in Toledo and “softening the shoreline” in Detroit; and could also study Buffalo, NY; and Hamilton, Ontario.

Dr. Reed said both Texas and the Great Lakes would be good locales to consider themes, although November in Buffalo, or another Great Lakes locale, might not be as comfortable as May –recall the freezing weather in Omaha at the November 2003 meeting. She suggested meetings be accompanied by one day of site visits and one day of meetings with stakeholders. In Detroit, she suggested the Board look at the interface between land and water.

LTG Flowers agreed that the theme should drive the agenda of Board meetings and supporting events.

Mr. Babcock suggested the Board might also want to examine emerging issues on the Upper Mississippi River, where a report is due this summer.

LTG Flowers agreed the Board could look at the Upper Mississippi again, as it did in April 2002.

Dr. Hullar said he especially appreciated the working sessions with the Chief between the formal meetings.

Mr. Caver agreed, saying these sessions are useful in boiling down themes for the Board to consider.

LTG Flowers said Corps staff could put together a straw man of proposed themes.

Dr. Hullar allowed that new developments could also drive the choice of a meeting site.

LTG Flowers agreed, saying that the Corps and EPA are now looking at “portfields,” brownfields located in water. The Corps is working on three such projects – in Bremerton, WA; Tampa, FL; and New Bedford, MA. In New England, he said, the Board could also look at the Muddy River in Boston, the Massachusetts Military Reservation, etc. The Board has not been to New England yet. He concluded, though, that the Corps – subject to the desires of the incoming Chief of Engineers - would work on holding the next meeting in Detroit.

7. PUBLIC COMMENT:

Ms. Melissa Samet, Senior Director for Water Resources, American Rivers, and co-chair of the Corps Reform Network, said she wanted to make the Board aware of the Network’s 120 groups in all 50 States – taxpayer as well as environmental groups. The Network’s purpose, she said, is to make the Corps manage water resources in an environmentally sustainable way. Most members have fought Corps projects, and many are very familiar with its policies and procedures. The Network recognizes that the Corps will be around for a long time, but wants it to do better. Currently, she said, the Corps is carrying out some studies for potential projects contrary to the Strategic Plan. She suggested the Board take time to meet with members – it would help their discussion of broader issues – the Network can do this anywhere nationwide. As for the Strategic Plan, she said, the Network was happy to see the term “customer” removed, since they see the Corps’ customers as the public at large, not just local sponsors. She urged the concepts in the Strategic Plan to be applied not just to current studies, but to “legacy projects” as well, and said, “If the Corps wants to show it’s serious about the Strategic Plan, apply it.”

Dr. Hong Mo Young, Department of Landscape Architecture, University of California, Berkeley, is a visiting professor from South Korea, researching stream restoration with Dr. Kondolf. He thanked the Board for allowing him to attend and broaden his knowledge of restoration. In Korea, he said, he has been a member of several advisory boards, and suggested that this Board could use members with expertise in project planning, economics and social issues; and should consider adaptive management issues. In the U.S., he noted, local governments are often handed projects to manage, especially once they are completed, whereas in Korea the Ministry of Construction continues to manage completed projects. Thus in the U.S., adaptive management requires local buy-in. He noted, however, that plans for large areas such as San Francisco Bay could be applied elsewhere. Every site, he allowed, will have its own characteristics, but there can be a general framework.

Mr. Scott Nicholson, U.S. Fish & Wildlife Service, discussed the Hamilton Bay Wetlands Project, calling it an outstanding example of partnering among 250 stakeholders, beneficial use of dredged material, etc. Decisions on this project and others in the Bay area were consensus based, with 26 participating agencies on a board. Although many agencies participated in that project, he said, it wouldn’t exist without the Corps’

long-term management strategy. He said the discussion of partnering with the educational community at this meeting was especially interesting in that it could provide greater integration among disciplines.

8. ADJOURNMENT:

Dr. Hullar thanked the Chief for his pro-active leadership in environmental matters, and especially for his revitalizing the Environmental Advisory Board.

LTG Flowers thanked the members of the Board for their service.
There being no further business, the meeting was adjourned at 1130 hours.